

To: Reclamation Board

From: Ricardo S. Pineda, Chief  
Floodplain Management Branch  
Department of Water Resources

Subject: Department of Water Resources report to the Reclamation Board on  
FEMA Provisionally Accredited Levees

Date: August 17, 2007

This report contains the following information related to the FEMA Provisionally Accredited Levee Program (PAL Levees):

1. A summary table (Table 1) of 22 PAL or levee certification related letters sent to the Reclamation Board or local agencies for areas under the jurisdiction of the Reclamation Board within the Central Valley. Some of the letters sent by FEMA or the local agency relate to State-Federal project levees and other letters relate to non-project levees or levee like structures for which the Reclamation Board is not the non-federal sponsor.
2. Copies of the 22 letters sent to the Reclamation Board or Department of Water Resources directly or as a cc.
3. A set of levee "status tables" generated from the FEMA PAL website that show the following: levee identification number, levee type, USACE program levee, community name, PAL levee status, project or non-project levee designation, flooding source, maintenance organization and comments. These PAL status tables were developed for Contra Costa County, Fresno County, Kings County, Merced County, San Joaquin County, Solano County, Stanislaus County, City of Stockton and Tulare County. These counties fall under the regulatory jurisdiction of the Reclamation Board. Maps showing the specific levee segments (FEMA P or L designation) are not provided.
4. Summary information on the FEMA Provisionally Accredited Levee Program including FEMA Procedure Memorandums 34 and 43 (revised). Information is also provided on FEMA levee certification requirements including a copy of the FEMA regulations section 44 CFR 65.10.

The Reclamation Board and Department of Water Resources have not received any written requests from local agencies to sign a PAL "B" agreement for which the State of California is serving as the "levee owner" via its role as the non-federal sponsor of the levee system.

The Reclamation Board did receive a letter from Solano County dated May 9, 2007 (letter no. 4 in Table 1) notifying the Reclamation Board that FEMA had identified levees in Solano County that were eligible for PAL "B" agreements and that Solano County was contacting all potential levee owners to ensure that they were aware of the FEMA PAL Program.

DWR contacted Solano County to inform them that there was insufficient geotechnical information related to the project levees in Solano County for DWR to support signing a PAL "B" agreement. A letter from DWR will be sent to Solano County on the issue.

DWR has also met with San Joaquin County, Reclamation District 17 and a consultant representing various interests within San Joaquin County to discuss the PAL Program, PAL designation of levees in San Joaquin County and San Joaquin County local communities, resolution of identified maintenance deficiencies and levee certification issues related to RD 17.

Discussions with San Joaquin County and local officials are ongoing, and a letter will be sent to San Joaquin County and San Joaquin County local officials detailing the requirements for DWR to support signing a PAL "B" agreement. PAL agreements cannot be signed for PAL "C-2" levees until the identified maintenance deficiencies are corrected.

General criteria that will need to be met prior to DWR signing a PAL "B" agreement as the levee owners are as follows:

1. Review of a hydraulic study using best available hydrologic data to determine the expected 100-year flood event water surface profile to ensure that all reaches of the levee system meet FEMA minimum freeboard requirements.
2. Comprehensive review of available geotechnical information.
3. Review of the levee system's performance history during high water events.
4. At a minimum, levee crown geotechnical borings every 1,000 feet including laboratory testing of samples. Borings will need to be made at closer intervals if the data warrants further investigations.
5. Levee section and foundation seepage, settlement and stability analyses.
6. Development of levee analyses summary and conclusions.

If you have any questions on this report, please do not hesitate to contact me directly via telephone at (916) 574.0611 or via email at [rpineda@water.ca.gov](mailto:rpineda@water.ca.gov)

**Table 1: Summary of PAL Correspondence to Reclamation Board and DWR**

LTR #	Date of Letter	Date Received	To Name and Company	From Name and Company	Subject	Status
#1	3/30/2007	4/6/2007	Mr. Jay Punia - General Manager California Reclamation Board	Colonel Ronald Light USACE District Engineer	Identifies San Joaquin & Sacramento Valley levee maintenance deficiencies	The state sponsored project levee owners have been notified and DWR is following up with each applicant
#2	4/17/2007	4/19/2007	Mr. Jay Punia - General Manager California Reclamation Board	FEMA Region IX - Sally Ziolkowski	RD 501 PAL "C-2" levees in Solano County	DWR is working with Solano County and RD 501 on Maintenance deficiencies
#3	5/4/2007	5/10/2007	Mr. Chris Neudeck Kjeldsen, Simnick & Neudeck	FEMA Region IX - K. Schaefer	RD 17 levees do not meet FEMA standards ("PAL E")	Oral request from RD 17 for DWR to sign PAL agreement
#4	5/9/2007	5/11/2007	Mr. Jay Punia - General Manager California Reclamation Board	Solano County - Department Resource Management	FYI for PAL "B" levees in Solano County	DWR per phone call notified Solano Co. of insufficient data issue to support PAL "B" application to FEMA.
#5	5/16/2007		Mr Toany Barba, Chair - County Supervisors Kings County	FEMA Region IX - Sally Ziolkowski	Notification of PAL "A" or PAL "B" levees in Kings County	No Reclamation Board action required for these non-project levees
#6	5/24/2007	5/29/2007	Mr. Jay Punia - General Manager California Reclamation Board	FEMA Region IX - Sally Ziolkowski	San Joaquin County and City of Stockton Levees may be PAL "C2" eligible	No current written requests from City of Stockton, DWR has met with SJAFCA consultants and City of Stockton. DWR letter to follow.
#7	5/24/2007		The Honorable Edward J. Chavez, Mayor - City of Stockton	FEMA Region IX - Sally Ziolkowski	Identifies PAL "A" or PAL B" levees in City of Stockton	No current written requests from City of Stockton, DWR has met with SJAFCA consultants and City of Stockton. DWR letter to follow.
#8	5/24/2007		Mayor Kristy Syles City of Lathrop	FEMA Region IX - Sally Ziolkowski	Eligible PAL "B" levees in City of Lathrop	DWR is in discussion with RD 17 regarding levee certification issues
#9	5/24/2007		Mr. Victor Mow, Chairman - San Joaquin County Board of Sups.	FEMA Region IX - Sally Ziolkowski	Identifies PAL "A" or PAL B" levees in San Joaquin County	DWR working with San Joaquin officials and their consultants
#10	5/24/2007		The Honorable Bob Johnson, Mayor, City of Lodi	FEMA Region IX - Sally Ziolkowski	City of Lodi's PAL "A" levees may be eligible	No Reclamation Board action required for these non-project levees
#11	5/30/2007		Mr. William O'Brien, Chairman Stanislaus County Board of Sups	FEMA Region IX - Sally Ziolkowski	Identifies PAL "E" levees in Stanislaus County	No Reclamation Board action required for these non-project levees

**Table 1: Summary of PAL Correspondance  
to Reclamation Board and DWR (Page 2)**

LTR #	Date of Letter	Date Received	To Name and Company	From Name and Company	Subject	Status
#12	5/30/2007		The Honorable Chris Cifiasi, Mayor, City of Riverbank	FEMA Region IX - Sally Ziolkowski	PAL "A" levees in the City of Riverbank, Stanislaus County	No Reclamation Board action required for these non-project levees
#13	6/19/2007		Mayor Kristy Syles City of Lathrop	Les Harder, Deputy Director, DWR	100 year certification for RD-17 levees	DWR is holding ongoing discussions with RD 17
#14	7/19/2007		Kathleen Schaefer FEMA Region IX	Dante John Nominelli Reclamation District 17	FEMA accreditation of RD 17 levees	DWR is in discussion with RD 17 regarding levee certification issues
#15	7/11/2007	7/16/2007	TR Flinn, Director Public Works San Joaquin Flood Control	FEMA Region IX - Sally Ziolkowski	Response to San Joaquin Water Conservation District letter of June 15 2007	DWR continues to coordinate with San Joaquin County and local agencies
#16	7/25/2007		Mr. Reggie Hill, Lower San Joaquin Levee District	FEMA Region IX - Sally Ziolkowski	Lower San Joaquin River District Levees do not meet FEMA standards (PAL "E")	No follow-up by DWR required as levees are not designed for a 100 year event
#17	7/25/2007		Mr. Wendell Trinkler, Jr., President Reclamation District 2091	FEMA Region IX - Sally Ziolkowski	RD #2091 Levees do not meet FEMA standards (PAL "E")	No follow-up by DWR required as levees are not designed for a 100 year event
#18	7/25/2007		Mr. Joe Sallaberry, President Reclamation District 2063	FEMA Region IX - Sally Ziolkowski	RD #2063 Levees do not meet FEMA standards (PAL "E")	No follow-up by DWR required as levees are not designed for a 100 year event
#19	7/25/2007		Mr. Robert Parris, Ph.D. Reclamation District 2176	FEMA Region IX - Sally Ziolkowski	RD #2176 Levees do not meet FEMA standards (PAL "E")	No follow-up by DWR required as levees are not designed for a 100 year event
#20	7/25/2007		Mr. William Lyons Jr. President Reclamation District 2092	FEMA Region IX - Sally Ziolkowski	RD #2092 Levees do not meet FEMA standards (PAL "E")	No follow-up by DWR required as levees are not designed for a 100 year event
#21	7/25/2007		Mr. William Lyons Jr. President Reclamation District 2031	FEMA Region IX - Sally Ziolkowski	RD #2031 Levees do not meet FEMA standards (PAL "E")	No follow-up by DWR required as levees are not designed for a 100 year event
#22	7/25/2007		Mr. Doug Dalton, Manager Reclamation District 1602	FEMA Region IX - Sally Ziolkowski	RD #1602 Levees do not meet FEMA standards (PAL "E")	No follow-up by DWR required as levees are not designed for a 100 year event